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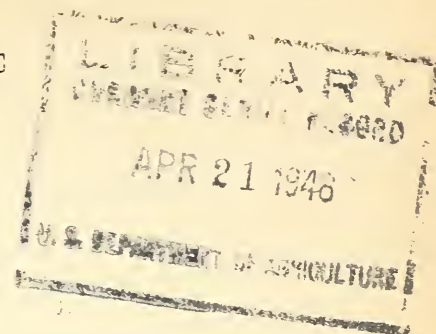
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I N S E C T   P E S T   S U R V E Y



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STATUS OF THE EUROPEAN CORN BORER IN 1947

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Distribution

The European corn borer (*Pyrausta nubilalis* (Hbn.)) is now known to infest corn in 1,052 counties in 28 States. In 1947 a total of 94 new county infestations were reported from 11 States. All but 6 of the new county infestations were found west of the Mississippi River. The known distribution of the corn borer, including the 94 new county infestations, is shown on Map 1.

The State of Minnesota reported the largest number of new county infestations, a total of 41. All but 8 counties in that State are now known to be infested. A total of 19 newly infested counties were reported by Nebraska near the center of which State the borer has reached its westernmost point. Surveys by State personnel revealed that in Iowa the corn borer infests every county, 10 of which were not reported prior to 1947. First records of infestation, involving 1 to 11 counties, were also made in 1947 in Kansas, Kentucky, Missouri, New York, North Dakota, Pennsylvania, Tennessee and Virginia.

<sup>1/</sup>The data presented in this report were assembled and tabulated at the European Corn Borer Research Laboratory, Toledo, Ohio, Wm. G. Bradley in charge. The field data were obtained by the Bureau of Entomology and Plant Quarantine and State agencies, or by the two in cooperation. State agencies that contributed data and assistance were as follows: Illinois Natural History Survey; Indiana State Department of Conservation; Entomological Commission of Kansas; State Departments of Agriculture of Maine, Maryland, Minnesota, New Jersey, New York, North Carolina, Pennsylvania, Rhode Island, Vermont, Virginia, and Wisconsin; State Agricultural Experiment Stations of Connecticut, Delaware, Indiana, Iowa, Kentucky, Massachusetts, Missouri, Nebraska, New Hampshire, New York (Geneva), North Dakota, Ohio, South Dakota, Tennessee, and the Virginia Truck Experiment Station.

The States and counties from which infestations were reported for the first time in 1947 are listed below.

Iowa:

Cherokee  
Dickinson  
Fremont  
Lyon  
Mills  
O'Brien  
Osceola  
Plymouth  
Sioux  
Woodbury

Kansas:

Anderson  
Atchison  
Bourbon  
Coffey  
Doniphan  
Franklin  
Leavenworth  
Jefferson  
Linn  
Miami  
Csage

Kentucky:

Elliott

Minnesota:

Aitkin  
Becker  
Beltrami  
Benton  
Big Stone  
Cass  
Clay  
Clearwater  
Cottonwood  
Crow Wing

Minnesota, cont.:

Douglas  
Grant  
Hubbard  
Isanti  
Itasca  
Kanabec  
Lincoln  
Lyon  
Mahnomen  
Marshall  
Mille Lacs  
Morrison  
Murray  
Nobles  
Norman  
Otter Tail  
Pennington  
Pine  
Pipestone  
Polk  
Pope  
Red Lake  
Redwood  
Renville  
Rock  
Sherburne  
Stevens  
Swift  
Traverse  
Wadena  
Wilkin

Missouri:

Daviess  
Gentry  
Harrison  
Jackson  
Montgomery

Nebraska:

Burt  
Butler  
Cass  
Cedar  
Colfax  
Dakota  
Douglas  
Hall  
Hamilton  
Johnson  
Merrick  
Nance  
Otoe  
Pawnee  
Platte  
Polk  
Saline  
Saunders  
Seward  
Stanton

New York:

Clinton

North Dakota:

Cass  
Richland

Pennsylvania:

Fulton

Tennessee:

Davidson

Virginia:

Southampton

### Abundance

The Bureau of Entomology and Plant Quarantine and agencies in 22 States cooperated in surveys to determine the abundance of the European corn borer in 532 counties, or more than half the number known to be infested in the United States. A uniform number of 10 sample fields were surveyed in most counties. The standard sample consisted of the examination of 25 consecutive plants to determine the percentage infested, and the dissection of 2 plants to determine the number of borers per plant. The product of the percent infested and the average number of borers per infested plant, expressed as borers per 100 plants, indicated the borer population. The distribution of the counties surveyed and the abundance of borers in corn are shown on Map 2.

Two States--Maine and Pennsylvania--preferred to examine more than 25 plants per field, and to dissect more than 2 plants in each. Only three States--Iowa, Minnesota, and Missouri--observed fewer than 10 fields per county in some, or all, of the counties examined.

In Iowa the 12 corn-testing districts were utilized as the survey unit and 50 to 52 standard samples were taken in each district. The samples were distributed over the districts so that 3 or more samples were taken in each county.

In Minnesota 10 standard samples were taken in each of 30 counties of the southeastern part of the State, and 5 samples were taken in each of 32 additional counties. The latter counties are arranged according to the crop-reporting districts in which they fall. The 1947 survey data are summarized in table 1.



Table 1.--Summary by States of European corn borer abundance in corn, fall of 1947, and comparisons with data for 1946

State	1946		1947		Counties surveyed both years			Signi- ficant change
	Number of counties surveyed	Average number of borers per 100 plants	Number of counties surveyed	Average number of borers per 100 plants	Number of counties	Borers per 100 plants 1946	1947	
Connecticut	8	9	8	23	8	9	23	Increase
Delaware	3	62	3	85	3	62	85	None
Illinois	37	90	37	137	37	90	137	Increase
Indiana	70	31	70	67	70	31	67	Increase
Iowa <sup>1/</sup>	58	77	99	119	74	89	148	Increase
Kentucky	9	54	7	144	2	79	119	Increase
Maine	9	22	12	81	9	22	88	Increase
Maryland	19	95	3	165	3	109	165	None
Massachusetts	4	87	4	51	4	87	51	Decrease
Michigan	6	5	6	54	6	5	54	Increase
Minnesota	22	9	61	119	22	9	273	Increase
Missouri	18	8	18	21	4	15	20	None
New Hampshire	9	26	9	64	9	26	64	Increase
New Jersey	20	105	20	59	20	105	59	Decrease
New York	20	32	20	73	20	32	73	Increase
North Carolina	3	98	3	36	3	98	36	Decrease
Ohio	30	21	30	43	30	21	43	Increase
Pennsylvania <sup>2/</sup>	50	69	43	70	40	77	74	None
Rhode Island	1	181	3	90	1	181	67	None
Vermont	11	17	11	44	11	17	44	Increase
Virginia	14	59	13	124	13	63	124	Increase
Wisconsin	43	35	52	48	43	35	56	Increase
Total or average	464	55	532	78	432	57	85	Increase

<sup>1/</sup> Comparable data for 74 counties in 9 districts.

<sup>2/</sup> Data for 1946 differ from those previously given in that additional counties have been included.

Surveys in the 13 easternmost States of the infested territory indicated that the borer increased in numbers in 1947 compared with 1946 in Maine, New Hampshire, Vermont, Connecticut, New York, Maryland, Delaware and Virginia. A decrease occurred in only 5 States--Massachusetts, Rhode Island, Pennsylvania, New Jersey, and North Carolina.

The borers per 100 plants averaged less than 100 in all eastern States except in Virginia with 124 and Maryland with 165. The former average indicates that a significant increase occurred in Virginia, but in Maryland the increase was not statistically significant because of the small number of counties examined. Although the average number of borers per 100 plants was less than 100 in Maine, New Hampshire, Vermont, Connecticut, and New York, the data indicate statistically significant increases in population ranging from 128 to 296 percent.

In New Hampshire, Massachusetts, Connecticut, and Delaware no county average exceeded 100 borers per 100 plants, and only one county each in Vermont, Rhode Island, and Maryland exceeded the latter figure. Two counties in Maine and three counties in New York exceeded 100 borers per 100 plants; two counties in the latter state, Nassau and Suffolk, exceeded 200 borers. The surveyed counties in Virginia averaged 124 borers per 100 plants; six counties averaged more than 100 borers, of which four were above 200, but none exceeded 300 borers per 100 plants.

Of the 43 counties surveyed in Pennsylvania, 13 averaged more than 100 borers per 100 plants, including 4 that exceeded 200.

The decrease observed in Pennsylvania is too small to be significant. Because of the variability of the Rhode Island data, the decrease in that State is not considered significant. Significant decreases occurred in North Carolina and New Jersey. The decrease in the latter State, because of the full quota of counties surveyed, is of unusual interest since the population dropped from 105 in 1946 to 59 in 1947.

The surveys in the 9 western States indicated that a general increase in borer population had occurred and was statistically significant in every case except in the state of Missouri. The significant increases ranged from about 52 percent in Illinois and Kentucky to about 29 fold in Minnesota in the counties for which comparable data are available.

The average populations in Indiana, Michigan, and Ohio were less than 100 borers per 100 plants. Only 1 county each in Ohio and Michigan averaged more than 100 borers per 100 plants. In Indiana, 7 counties fell in this category, and 2 counties exceeded 200 borers.

The highest mean population among the western group was observed in Kentucky where only 7 counties were examined. The population in Illinois averaged 137 borers per 100 plants, which was higher than the averages for Iowa and Minnesota. However, the data for comparable counties, i.e., those surveyed in both 1946 and 1947, indicate that the population increase was greater and the estimated mean population was higher in Minnesota than in any of the other States.

The county averages of the Illinois survey ranged from 3.2 to 453.6 borers per 100 plants; only 16 counties averaged less than 100 borers and 4 exceeded 300 borers.

The 12 districts in Iowa averaged 148 borers and ranged as high as 329 borers per 100 plants. A county in district No. 6 averaged as high as 469 borers, but county averages in this case, because of the small number of samples taken per county, are not so reliable as the district mean.

The highest county average, 618, based upon a standard count, was for Steele County, Minn. In that State standard counts were made in 30 counties, only 10 of which averaged less than 100 borers and 6 more than 400 borers per 100 plants.

An additional 31 counties in Minnesota were surveyed utilizing 5 counts per county. These data are presented in groups according to the crop reporting district in which they fall. The counts in the 31 counties indicated that low populations prevailed, none exceeding 80 borers per 100 plants.

The population data for 1946 and 1947 are presented by counties in table 2. In this table the survey data for both years are given, as well as means for counties surveyed in both years, to indicate trends in populations in 1947.

In general, the 1947 crop season was unfavorable for high corn yields except in some southeastern States. Production of corn was down in all of the Corn Belt States. The planting season was unfavorable because of the wet condition of the fields, and large acreages were planted late. The germination period of early planted corn was such that poor stands were obtained, and large acreages were plowed under and planted to other crops.

The poor spring condition was followed by droughty conditions in large areas of the Corn Belt which further reduced prospective yields. However, late summer and early fall conditions were ideal in most States and more corn ripened and was harvested than was expected.

Experience has shown that, as a general rule, conditions that are unfavorable to corn development are also unfavorable for high borer survival. The early brood of borers was seriously affected by prevailing conditions and populations were light. However, the ideal conditions of late summer and fall with much late corn permitted the second-brood borer to realize its high potential and resulted in high borer populations.



Table 2.--European corn borer abundance in corn, fall of 1947, and comparisons with data for 1946

State and county	Average number of borers per 100 plants		State and county	Average number of borers per 100 plants	
	1946	1947		1946	1947
Connecticut:			Illinois (cont.):		
Fairfield	14	17	Lawrence	3	13
Hartford	16	21	Livingston	137	157
Litchfield	2	13	Logan	11	110
Middlesex	8	22	Macon	12	35
New Haven	14	25	Madison	10	21
New London	4	43	McDonough	54	75
Tolland	2	26	McLean	44	145
Windham	15	11	Mercer	78	422
Delaware:			Houltrie	1	47
Kent	40	98	Ogle	274	236
New Castle	35	59	Peoria	50	197
Sussex	113	97	St. Clair	17	27
Illinois:			Sangamon	22	119
Adams	12	58	Vermilion	14	89
Boone	101	195	Whiteside	270	166
Brown-Cass	12	36	Will	90	123
Bureau	192	324	Winnebago	259	343
Champaign	19	49	Woodford	92	160
Christian	16	50	Indiana:		
Clark	7	36	Adams	36	18
DeKalb	325	130	Allen	52	23
DuPage	84	104	Bartholomew	15	93
Hancock	69	106	Benton	53	63
Henderson	133	229	Blackford	5	43
Iroquois	54	97	Boone	10	101
Jasper	5	3	Carroll	45	31
Jo Daviess	275	464	Cass	31	39
Kankakee	32	163	Clay	3	4
Knox	49	249	Clinton	36	91
Lake	113	58	Dearborn	2	6
LaSalle	286	89	Decatur	11	14
			DeKalb	44	78
			Delaware	17	64
			Elkhart	53	189
			Fayette	4	25
			Fountain	30	33

Table 2.--(Continued)

State and county	Average number of borers per 100 plants		State and county	Average number of borers per 100 plants	
	1946	1947		1946	1947
Indiana (cont.):			Indiana (cont.):		
Franklin	4	41	Tipton	10	11
Fulton	78	97	Union	8	45
Gibson	4	18	Vermillion	59	216
Grant	31	22	Vigo	12	65
Hamilton	12	6	Wabash	29	30
Hancock	8	65	Warren	89	63
Hendricks	22	69	Wayne	9	21
Henry	9	97	Wells	18	29
Howard	47	27	White	47	84
Huntington	28	129	Whitley	100	94
Jasper	63	90			
Jay	17	10	Iowa:		
Jefferson	15	36	District 1--		
Johnson	10	60	Clay	-	43
Knox	12	38	Dickinson	-	14
Kosciusko	75	129	Emmet	-	30
Lagrange	30	206	Lyon	-	7
Lake	69	109	Osceola	-	3
LaPorte	55	85	O'Brien	-	33
Madison	13	10	Palo Alto	-	64
Marion	12	23	Sioux	-	20
Marshall	42	143			
Miami	33	29	District 2--		
Montgomery	24	77	Cerro Gordo	-	79
Newton	25	146	Floyd	44	234
Noble	91	180	Hancock	-	75
Ohio	20	17	Kossuth	35	51
Owen	10	47	Mitchell	-	159
Parke	53	236	Winnebago	-	90
Porter	65	84	Worth	11	185
Posey	6	12			
Pulaski	67	140	District 3--		
Putnam	19	97	Allamakee	37	78
Randolph	13	11	Chickasaw	-	239
Ripley	9	5	Clayton	-	128
Rush	8	23	Fayette	56	322
St. Joseph	82	153	Howard	6	82
Shelby	10	80	Winnebago	-	171
Starke	65	97			
Steuben	41	99	District 4--		
Sullivan	7	34	Cherokee	-	14
Switzerland	34	19	Ida	-	62
Tippecanoe	32	45	Plymouth	-	26
			Pocahontas	-	28
			Sac	-	57
			Woodbury	-	65
			Buena Vista	6	51
			Calhoun	14	32

Table 2.--(Continued)

State and county	Average number of borers per 100 plants		State and county	Average number of borers per 100 plants	
	1946	1947		1946	1947
Iowa (Cont.):			Iowa (Cont.):		
District 5--			District 10--		
Butler	-	316	Adair	3	12
Franklin	87	186	Adams	-	11
Grundy	225	224	Fremont	-	7
Hamilton	31	54	Mills	-	20
Hardin	96	366	Cass	-	26
Humboldt	40	53	Montgomery	-	60
Webster	38	36	Page	-	3
Wright	23	109	Pottawattamie	-	58
			Taylor	-	5
District 6--			District 11--		
Black Hawk	313	264	Appanoose	30	68
Bremer	53	469	Clarke	-	75
Buchanan	102	267	Decatur	7	32
Clinton	191	105	Lucas	29	34
Delaware	-	330	Madison	-	13
Dubuque	47	269	Mahaska	78	190
Jackson	112	423	Marion	-	240
Jones	194	450	Monroe	-	49
Linn	193	433	Ringgold	-	17
District 7--			Union	15	50
Audubon	6	32	Warren	36	108
Guthrie	41	77	Wayne	-	10
Carroll	21	49	District 12--		
Crawford	12	158	Henry	28	65
Greene	63	67	Jefferson	-	53
Harrison	24	52	Wapello	60	70
Monona	7	135	Davis	-	73
Shelby	6	47	Van Buren	29	41
District 8--			Lee	52	26
Boone	12	74	Des Moines	74	141
Dallas	30	35	Kentucky:		
Jasper	88	99	Anderson	23	-
Marshall	200	168	Bourbon	139	-
Polk	83	20	Boyle	60	-
Poweshiek	-	74	Bullitt	-	30
Story	32	77	Fayette	152	194
Tama	205	252	Hardin	-	42
District 9--			Jefferson	-	192
Benton	210	344	Madison	15	-
Cedar	139	187	Mason	4	-
Iowa	-	197	Meade	-	60
Johnson	267	202	Scott	73	-
Keokuk	149	310	Trimble	6	45
Louisa	129	207	Warren	14	-
Muscatine	173	143	Woodford	-	442
Scott	111	243			
Washington	72	106			

Table 2.--(Continued)

State and county	Average number of borers per 100 plants		State and county	Average number of borers per 100 plants	
	1946	1947		1946	1947
Maine:			Minnesota:		
Androscoggin	19	103	Blue Earth	39	455
Cumberland	22	74	Brown	3	159
Franklin	18	85	Carver	-	225
Kennebec	30	68	Cottonwood	-	63
Knox	14	78	Dakota	5	267
Lincoln	-	52	Dodge	2	244
Oxford	11	116	Faribault	6	160
Piscataquis	-	59	Fillmore	4	215
Sagadahoc	-	70	Freeborn	20	430
Somerset	16	76	Goodhue	17	429
Waldo	21	70	Hennepin	-	89
York	48	94	Houston	19	178
Maryland:			Jackson	-	83
Allegany	6	-	LeSueur	13	72
Baltimore	282	-	McLeod	-	65
Calvert	28	-	Martin	2	85
Carroll	287	-	Mower	3	232
Caroline	76	-	Nicollet	13	137
Charles	3	-	Olmsted	5	477
Dorchester	118	-	Redwood	-	82
Harford	69	-	Renville	-	86
Howard	164	-	Rice	8	396
Kent	12	-	Scott	8	359
Montgomery	139	-	Sibley	-	47
Prince Georges	23	-	Steele	5	618
Queen Annes	24	-	Wabasha	7	169
St. Marys	47	-	Waseca	3	437
Somerset	47	98	Washington	0	89
Talbot	51	-	Watonwan	4	179
Washington	149	-	Winona	17	217
Wicomico	33	31	West Central District		
Worcester	246	366	Pig Stone	-	10
Massachusetts:			Chippewa	-	10
Bristol	68	49	Douglas	-	1
Franklin	114	15	Grant	-	0
Norfolk	87	97	Lac qui Parle	-	13
Plymouth	79	42	Pope	-	0
Michigan:			Stevens	-	0
Lenawee	18	55	Swift	-	4
Macomb	0	144	Traverse	-	0
Monroe	2	65	Yellow Medicine	-	8
Sanilac	3	19			
St. Clair	1	13			
Wayne	5	27			



Table 2.--(Continued)

State and county	Average number of borers per 100 plants		State and county	Average number of borers per 100 plants	
	1946	1947		1946	1947
Minnesota (cont.):			Missouri (cont.):		
Central District					
Benton	-	8	Montgomery	2	6
Kandiyohi	-	16	New Madrid	-	1
Meeker	-	16	Nodaway	-	9
Morrison	-	4	Perry	2	2
Sherburne	-	53	Ralls	10	8
Stearns	-	3	St. Charles	7	-
Todd	-	6	St. Louis	30	9
Wright	-	44	Scotland	5	129
East Central District			New Hampshire		
Anoka	-	80	Belknap	42	23
Chisago	-	32	Carroll	21	84
Isanti	-	44	Cheshire	53	65
Kanabec	-	5	Grafton	11	99
Mille Lacs	-	21	Hillsboro	26	71
Pine	-	13	Merrimack	10	28
Ramsey	-	38	Rockingham	24	58
Southwest District			Strafford	16	77
Lincoln	-	0	Sullivan	31	73
Lyon	-	2	New Jersey:		
Murray	-	8	Atlantic	98	53
Nobles	-	39	Bergen	242	115
Pipestone	-	1	Burlington	160	59
Rock	-	22	Camden	85	83
Missouri:			Cape May	86	47
Andrew	0	8	Cumberland	108	30
Buchanan	0	40	Essex-Union	32	55
Carroll	3	-	Gloucester	178	72
Chariton	3	-	Hunterdon	72	17
Clark	14	33	Mercer	196	36
Daviess	-	36	Middlesex	164	159
Gentry	-	23	Monmouth	184	35
Grundy	2	-	Morris	11	28
Harrison	-	22	Ocean	71	65
Holt	0	-	Passaic	94	147
Jackson	0	0	Salem	156	51
Lewis	14	25	Somerset	20	34
Linn	16	-	Sussex	9	24
Livingston	10	9	Warren	24	19
Marion	23	13			
Monroe	-	4			

Table 2.---(Continued)

State and county	Average number of borers per 100 plants		State and county	Average number of borers per 100 plants	
	1946	1947		1946	1947
New York:			Ohio (cont.):		
Albany	7	24	Logan	1	28
Columbia	12	51	Lucas	28	115
Dutchess	14	28	Madison	12	26
Erie	39	86	Mercer	3	14
Greene	6	78	Miami	0	35
Livingston	5	37	Montgomery	2	46
Monroe	7	57	Ottawa	31	17
Nassau	228	247	Paulding	7	24
Niagara	9	70	Pickaway	53	64
Oneida	4	15	Preble	4	31
Onondaga	23	91	Putnam	57	28
Ontario	10	10	Shelby	2	15
Orange	5	78	Van Wert	34	42
Orleans	9	58	Williams	8	21
Rensselaer	6	21	Wood	64	54
Saratoga	26	42			
Schenectady	0	58	Pennsylvania:		
Suffolk	187	146	Adams	187	231
Ulster	6	251	Allegheny	19	48
Wayne	36	12	Armstrong	5	3
			Bedford	-	9
North Carolina:			Berks	130	96
Camden	152	35	Blair	12	18
Currituck	94	57	Bradford	5	-
Pasquotank	47	16	Bucks	137	176
			Butler	4	7
Ohio:			Cambria	123	-
Allen	25	21	Carbon	26	7
Auglaize	0	27	Centre	38	41
Butler	14	53	Chester	134	109
Champaign	27	66	Clearfield	87	-
Clark	38	26	Clinton	40	-
Darke	1	24	Columbia	72	10
Defiance	21	36	Crawford	8	15
Fayette	25	22	Cumberland	180	241
Franklin	33	40	Dauphin	121	112
Fulton	38	66	Delaware	137	150
Greene	4	33	Elk	39	-
Hamilton	27	88	Erie	62	41
Hancock	66	97	Franklin	231	151
Hardin	11	68	Fulton	-	12
Henry	7	67	Huntingdon	39	13

Table 2.--(Continued)


State and county	Average number of borers per 100 plants		State and county	Average number of borers per 100 plants	
	1946	1947		1946	1947
Pennsylvania (cont.):			Virginia:		
Indiana	24	43	Accomack	93	166
Juniata	79	70	Clarke	41	236
Lancaster	102	118	Culpepper	20	22
Lawrence	17	22	Fairfax	13	69
Lebanon	184	208	Fauquier	37	231
Lehigh	56	70	Frederick	34	90
Luzerne	4	20	Gloucester	10	-
Lycoming	66	34	Loudoun	145	266
Mercer	23	20	Nansemond	11	2
Mifflin	67	62	Norfolk	69	8
Monroe	-	11	Northampton	96	180
Montgomery	280	123	Prince William	6	80
Montour	47	11	Princess Anne	23	235
Northampton	35	21	Westmoreland	19	22
Northumberland	60	26	Wisconsin:		
Perry	33	104	Adams	6	82
Philadelphia	68	123	Brown	29	50
Pike	18	-	Buffalo-Pepin	6	68
Schuylkill	54	59	Calumet	59	35
Snyder	85	30	Chippewa	-	9
Somerset	5	3	Clark	-	4
Sullivan	34	-	Columbia	13	21
Susquehanna	11	-	Crawford	21	127
Tioga	31	-	Dane	51	46
Union	51	76	Dodge	22	94
Wayne	3	-	Door	16	75
Westmoreland	11	38	Dunn	-	26
York	174	209	Fond du Lac	57	153
Rhode Island:			Grant	7	102
Newport	-	86	Green	55	41
Providence	-	118	Green Lake	42	85
Washington	181	67	Iowa	22	81
Vermont:			Jackson	-	11
Addison	9	4	Jefferson	25	16
Bennington	37	54	Juneau	16	3
Caledonia	5	19	Kenosha	82	37
Chittenden	23	41	Kewaunee	28	48
Franklin	10	8	LaCrosse	26	16
Grand Isle	11	11	Lafayette	35	75
Orange	17	86	Manitowoc	35	61
Rutland	23	102	Marathon	-	11
Washington	9	26	Marinette	31	52
Windham	35	45	Marquette	42	33
Windsor	7	86			


Table 2.--(Continued)

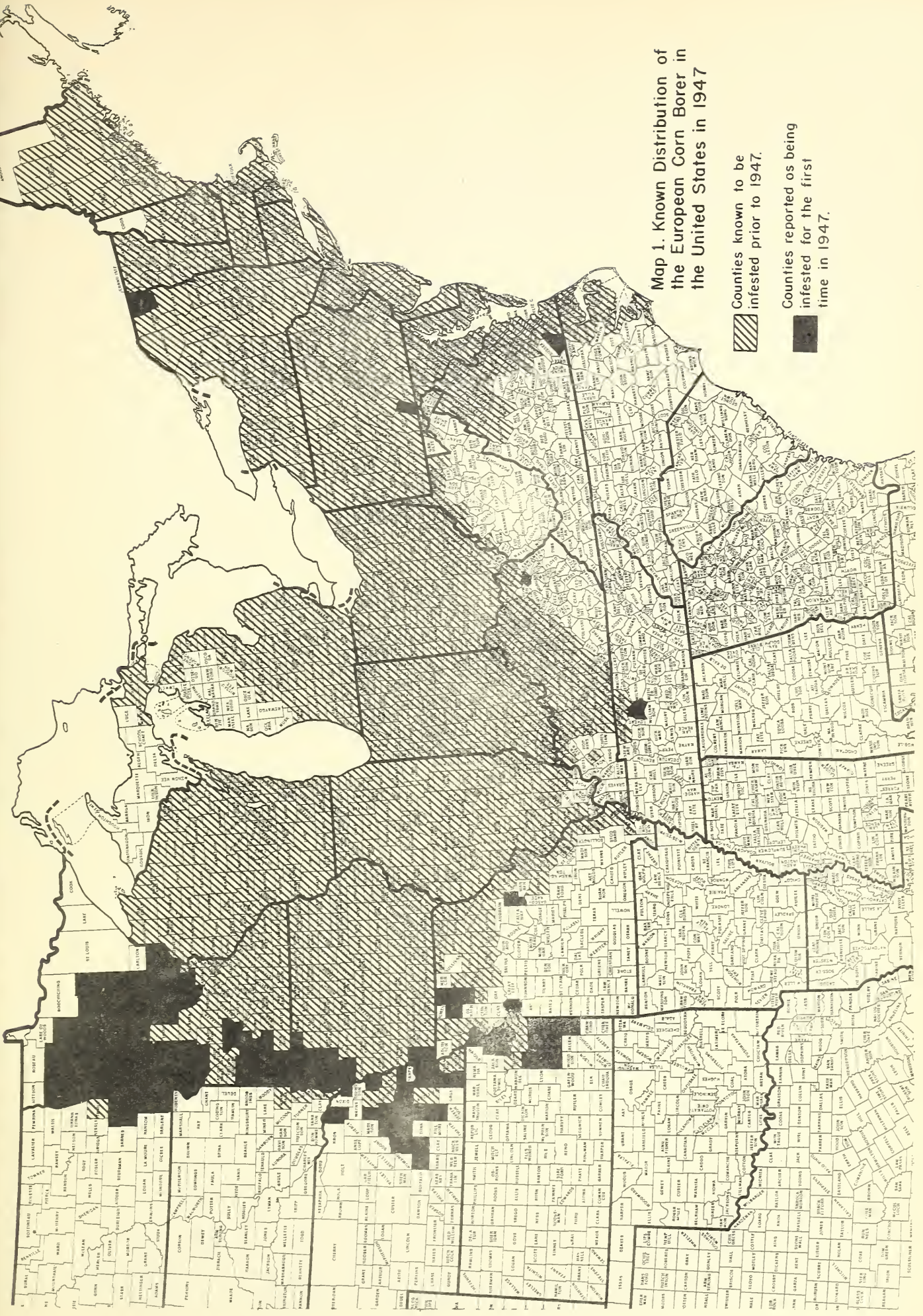
State and county	Average number of borers per 100 plants		State and county	Average number of borers per 100 plants	
	1946	1947		1946	1947
Wisconsin (cont.):			Wisconsin (cont.):		
Milwaukee	32	31	Shawano	4	23
Monroe	-	7	Sheboygan	36	63
Oconto	51	24	Trempealeau	16	14
Outagamie	41	176	Vernon	11	33
Ozaukee	101	46	Walworth	12	42
Pierce	3	31	Washington	67	73
Portage	-	14	Waukesha	32	7
Racine	82	28	Waupaca	31	27
Richland	60	26	Waushara	17	33
Rock	32	37	Winnebago	71	185
St. Croix	-	4	Wood	-	20
Sauk	28	34			



Map 1. Known Distribution of the European Corn Borer in the United States in 1947

 Counties known to be infested prior to 1947.

 Counties reported as being infested for the first time in 1947.







Map 2. Abundance of the  
European Corn Borer in 1947

Borers per 100 Plants

